NASA TECHNICAL MEMORANDUM

NASA TM X-73393

(NASA-TM-X-73393) APOLLO TELESCOPE MOUNT. A PARTIAL LISTING OF SCIENTIFIC PUBLICATIONS AND PRESENTATIONS, SUPPLEMENT 1 (NASA) 51 p HC A04/MF A01 CSCL 03A

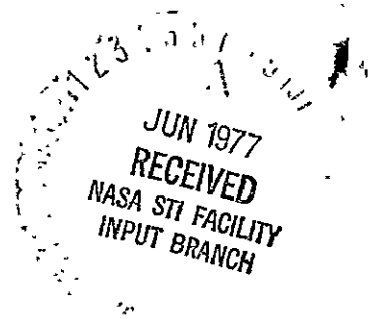
N77-24495

Unclas
G3/37 29157

APOLLO TELESCOPE MOUNT—A PARTIAL LISTING OF SCIENTIFIC PUBLICATIONS AND PRESENTATIONS SUPPLEMENT 1

Edited by John M. Reynolds and William C. Snoddy
Space Sciences Laboratory

May 1977



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TECHNICAL REPORT STANDARD TITLE PAGE

1. REPORT NO.	2. GOVERNMENT ACCESSION NO.	3. RECIPIENT'S CATALOG NO.
NASA TM X-73393		

4. TITLE AND SUBTITLE	5. REPORT DATE
Apollo Telescope Mount — A Partial Listing of Scientific Publications and Presentations, Supplement 1	May 1977
	6. PERFORMING ORGANIZATION CODE
7. AUTHOR(S)	8. PERFORMING ORGANIZATION REPORT #
Edited by John M. Reynolds and William C. Snoddy	
9. PERFORMING ORGANIZATION NAME AND ADDRESS	10. WORK UNIT NO.
George C. Marshall Space Flight Center Marshall Space Flight Center, Alabama 35812	11. CONTRACT OR GRANT NO.
	13. TYPE OF REPORT & PERIOD COVERED
12. SPONSORING AGENCY NAME AND ADDRESS	Technical Memorandum
National Aeronautics and Space Administration Washington, D. C. 20546	14. SPONSORING AGENCY CODE

15. SUPPLEMENTARY NOTES

Prepared by Space Sciences Laboratory, Science and Engineering

16. ABSTRACT

This report supplements NASA TM X-73300, April 15, 1976. These reports are compilations of bibliographies from the principal investigator groups of the Apollo Telescope Mount (Skylab solar observatory facility) that gathered data from May 28, 1973, to February 8, 1974. The analysis of these data is presently under way and is expected to continue for several years.

The publications listed in this report are divided into the following categories: (1) Journal Publications, (2) Journal Publications Submitted, (3) Other Publications, (4) Presentations — National and International Meetings, and (5) Other Presentations. An author index is included together with errata for the first report.

17. KEY WORDS	18. DISTRIBUTION STATEMENT
	William C. Snoddy Unclassified — Unlimited

19. SECURITY CLASSIF. (of this report)	20. SECURITY CLASSIF. (of this page)	21. NO. OF PAGES	22. PRICE
Unclassified	Unclassified	54	NTIS

For sale by National Technical Information Service, Springfield, Virginia 22151

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1. JOURNAL PUBLICATIONS

1.65 Solar X-Rays. J. H. Underwood. Science 159, 1968, 383.

1.66 Optical Design of a Glancing Incidence X-Ray Telescope. J. D. Mangus and J. H. Underwood. Applied Optics 8, 1969, 95.

1.67 Design Parameters of Paraboloid-Hyperboloid Telescopes for X-Ray Astronomy. L. P. Van Speybroech and R. C. Chase. Applied Optics 11, 1972, 440-445.

1.68 Wolter-Schwarzschild Telescopes for X-Ray Astronomy. R. C. Chase and L. P. Van Speybroech. Applied Optics 12, 1973, 1042-1044.

1.69 Digital Enhancement of Solar X-Ray Space Photography. R. P. Chiralo. Solar Physics 39, 1974, 377.

1.70 Use of Channel Electron Multipliers as Secondary Standard Detectors at EUV Wavelengths. J. G. Timothy and L. B. Lapson. Applied Optics 13, 1974, 1417.

1.71 Two-Dimensional Photon-Counting Detector Arrays Based on Microchannel Array Plates. J. G. Timothy and R. L. Bybee. Rev. Sci. Instr. 46, 1975, 1615.

1.72 The Analysis of XUV Emission Lines. G. L. Withbroe. Solar Physics 45, 1975, 301.

1.73 Coronal Changes Associated with a Disappearing Filament. N. R. Sheeley Jr., J. D. Bohlin, G. E. Brueckner, J. D. Purcell, V. E. Scherrer, R. Tousey, J. B. Smith Jr., D. M. Speich, E. Tandberg-Hanssen, R. M. Wilson, A. C. deLoach, R. B. Hoover, and J. P. McGuire. Solar Physics 45, 1975, 377.

1.74 The Calculation of Force-Free Fields from Discrete Flux Distributions. N. R. Sheeley, Jr., and J. W. Harvey. Solar Physics 45, 1975, 275.

1.75 The Sources of Material Comprising a Mass Ejection Coronal Transient. E. Hildner, J. T. Gosling, R. T. Hansen, and J. D. Bohlin. Solar Physics 45, 1975, 363.

1.76 Observation of the Structure and Evolution of Solar Flares with a Soft X-Ray Telescope. J. A. Vorpahl, E. G. Gibson, P. B. Landecker, D. L. McKenzie, and J. H. Underwood. Solar Physics 45, 1975, 199.

1.77 Spatial Structure and Temporal Development of a Solar X-Ray Flare Observed from Skylab (June 15, 1973). R. Pallavicini, G. S. Vaiana, S. W. Kahler, and A. S. Krieger. Solar Physics 45, 1975, 411-433.

1.78 The Interpretation of Simultaneous Soft X-Ray Spectroscopic and Imaging Observations of an Active Region. J. M. Davis, M. Gerassimenko, A. S. Krieger, and G. S. Vaiana. Solar Physics 45, 1975, 393-410.

1.79 The Representation of Magnetic Field Lines from Magnetograph Data. R. H. Levine. Solar Physics 44, 1975, 365.

1.80 Analysis of EUV Limb Brightening Observations from ATM I: Model for the Transition Layer and Corona. J. T. Mariska and G. L. Withbroe. Solar Physics 44, 1975, 55.

1.81 The Coronal Structure of Active Regions. M. Landini, B. C. Monsignori-Fossi, A. S. Krieger, and G. S. Vaiana. Solar Physics 44, 1975, 69-82.

1.82 A Comparison of Coronal X-Ray Structures of Active Regions with Magnetic Fields Computed from Photospheric Observations. G. Poletto, G. S. Vaiana, M. Zombeck, A. S. Krieger, and A. F. Timothy. Solar Physics 44, 1975, 83-99.

1.83 The Temperature Structure and Pressure Balance of Magnetic Loops in Active Regions. P. V. Foukal. Solar Physics 43, 1975, 327.

1.84 Evidence for Downflow Following a Coronal Transient? (Research Note). E. Hildner and W. Livingston. Solar Physics 42, 1975, 391-394.

1.85 Limb Brightening Curves of XUV Transition Zone Lines in the Quiet Sun and in a Polar Coronal Hole Observed from Skylab. G. A. Doschek, U. Feldman, and R. Tousey. Astrophys. J. Lett. 202, 1975, L147.

1.86 The Intensities and Profiles of XUV Transition Lines in a Quiet Sun Region Compared to a Polar Coronal Hole. U. Feldman, G. A. Doschek, and R. Tousey. Astrophys. J. Lett. 202, 1975, L151.

1.87 Spatial Distribution of XUV Emission in Solar Flares. C. C. Cheng and K. G. Widing. Astrophys. J. 201, 1975, 735.

1.88 Effects of Plasma Microfields on Radiative Transients from Atomic Levels above the Ionization Threshold. J. Davis and V. L. Jacobs. Phys. Rev. A 12, 1975, 2017.

1.89 Density Sensitive Lines of Highly Ionized Iron. G. A. Doschek, U. Feldman, J. Davis, and R. D. Cowan. Phys. Rev. A 12, 1975, 980.

1.90 Glancing Incidence Optics in X-Ray Astronomy: A Short Review. J. H. Underwood. Space Sci. Inst. 1, 1975, 289.

1.91 Coronal Holes, Solar Wind Streams and Recurrent Geomagnetic Disturbances: 1973-1976. N. R. Sheeley Jr., J. W. Harvey, and W. C. Feldman. Solar Physics 49, 1976, 271.

1.92 Distribution of Lifetimes for Coronal Soft X-Ray Bright Points. L. Golub, A. S. Krieger, and G. S. Vaiana. Solar Physics 49, 1976, 79.

1.93 Analysis of EUV Limb Brightening Observations from ATM II: Influence of Spicules. J. T. Mariska and G. L. Withbroe. Solar Physics 48, No. 1, 1976, 21-40.

1.94 Comparison of the 9.1 cm and Soft X-Ray Emission from an Active Region (Research Note). M. Gerassimenko, J. T. Nolte, and R. D. Petrasso. Solar Physics 48, 1976, 121.

1.95 Coronal X-Ray Enhancements Associated with H-Alpha Filament Disappearances. D. F. Webb, A. S. Krieger, and D. M. Rust. Solar Physics 48, 1976, 159.

1.96 Determination of the Energy or Pressure of a Solar X-Ray Structure Using X-Ray Filtergrams from a Single Filter. S. Kahler. Solar Physics 48, 1976, 255.

1.97 On the Occurrence of Sympathetic Flares. L. Fritzova-Svestkova, R. C. Chase, and Z. Svestka. Solar Physics 48, 1976, 275.

1.98 Expansion of a Coronal Arch Into the Outer Corona. D. M. Rust and E. Hildner. Solar Physics 48, 1976, 381.

1.99 Energy Released by the Interaction of Coronal Magnetic Fields. N. R. Sheeley, Jr. Solar Physics 47, 1976, 173.

1.100 On Build-Up of Magnetic Energy in the Solar Atmosphere. Y. Nakagawa, R. S. Steinolfson, and S. T. Wu. Solar Physics 47, 1976, 193-203.

1.101 Spectroscopic Far Ultraviolet Observations of Transition Zone Instabilities and Their Possible Role in a Pre-Flare Energy Build-Up. G. E. Brueckner, N. P. Patterson, and V. E. Scherrer. Solar Physics 47, 1976, 127.

1.102 Evidence for Magnetic Energy Storage in Coronal Active Regions. A. S. Krieger, L. D. DeFeiter, and G. S. Vaiana. Solar Physics 47, 1976, 117-126.

1.103 Observational Support for Active Role of Magnetic Field in Solar Flares. D. Rust. Solar Physics 47, 1976, 21-40.

1.104 What Should Be Observed on the Sun? Z. Svestka. Solar Physics 47, 1976, 375-384.

1.105 The Location of the Site of Energy Release in an X-Ray Flare-Like Brightening. R. D. Petrasso and A. S. Krieger. Solar Physics 47, 1976, 167-171.

1.106 Preflare X-Ray Morphology of Active Regions Observed with the AS&E Telescope on Skylab. S. W. Kahler and B. J. Buratti. Solar Physics 47, 1976, 157-165.

1.107 Evidence for Opposed Currents in Active Region Loops. R. H. Levine. Solar Physics 46, 1976, 159.

1.108 The EUV Chromospheric Network in the Quiet Sun. E. M. Reeves. Solar Physics 46, 1976, 53.

1.109 Comment on Lifetime Determination of Solar Features. L. Golub. Solar Physics 46, 1976, 115-119.

1.110 Coronal Holes as Sources of Solar Wind. J. T. Nolte, A. S. Krieger, A. F. Timothy, R. E. Gold, E. C. Roelof, G. Vaiana, A. J. Lazarus, J. D. Sullivan, and P. S. McIntosh. Solar Physics 46, 1976, 303-322.

1.111 An Atlas of Coronal Hole Boundary Positions May 28 to November 21, 1973. J. T. Nolte, A. S. Krieger, A. F. Timothy, G. S. Vaiana, and M. Zombeck. Solar Physics 46, 1976, 291-301.

1.112 Channel Electron Multipliers: Detection Efficiencies with Opaque Mg F Photocathodes at XUV Wavelengths. L. B. Lapson and J. G. Timothy. Applied Optics 15, 1976, 1218.

1.113 Structure of the Solar Chromosphere II: The Underlying Photosphere and Temperature Minimum Region. J. E. Vernazza, E. H. Avrett, and R. Loeser. Astrophys. J. Supp. Series 30, 1976, 1.

1.114 The Emission Line Spectrum Above the Limb of a Solar Coronal Hole: 1175-1940 Angstroms. U. Feldman, G. A. Doschek, M. E. Van Hoosier, and J. D. Purcell. Astrophys. J. Supp. Series 31, 1976, 445.

1.115 The Emission Line Spectrum Above the Limb of the Quiet Sun: 1175-1940 Angstroms. G. A. Doschek, U. Feldman, M. E. Van Hoosier, and J. D. F. Bartoe. Astrophys. J. Supp. Series 31, 1976, 417.

1.116 Spectroscopic Evidence for a Higher Rotation Rate of Magnetized Plasma at the Solar Photosphere. P. V. Foukal. Astrophys. J. Lett. 203, 1976, L145.

1.117 EUV Transients Observed at the Solar Pole. G. L. Withbroe, D. T. Jaffe, P. V. Foukal, M. C. E. Huber, R. W. Noyes, E. M. Reeves, E. J. Schmahl, J. G. Timothy, and J. E. Vernazza. The Astrophys. J. 203, 1976, 528.

1.118 The Lithium-Like $2s^2S$-$2p^2$ P Transition in Solar Flares. K. G. Widing and J. D. Purcell. Astrophys. J. Lett. 204, 1976, L151.

1.119 High Temperature Flare Lines in the Solar Spectrum 171-630 Å. G. D. Sandlin, G. E. Brueckner, R. Tousey, and V. E. Scherrer. Astrophys. J. Lett. 205, 1976, L47.

1.120 Excitation and Ionization of Helium in the Solar Atmosphere. E. H. Avrett, J. E. Vernazza, and J. L. Linsky. Astrophys. J. Lett. 207, 1976, L199.

1.121 The Triggering and Subsequent Development of a Solar Flare. J. A. Vorpahl. Astrophys. J. 205, 1976, 868.

1.122 Interpretation of Broad-Band Polarimetry of Solar Coronal Transients: Importance of Hα Emission. A. I. Poland and R. H. Munro. Astrophys. J. 209, 1976, 927-934.

1.123 Absolute Solar Ultraviolet Intensities and Their Variations with Solar Activity, Part I: The Wavelength Region 1750 Å - 2100 Å. G. E. Brueckner, J. D. F. Bartoe, O. K. Moe, and M. E. Van Hoosier. Astrophys. J. 209, 1976, 935.

1.124 Plasma Diagnostic Techniques in the Ultraviolet: The CIII Density-Sensitive Lines in the Sun. A. K. Dupree, P. V. Foukal, and C. Jordan. Astrophys. J. 209, 1976, 621.

1.125 Thermodynamic History of a Solar Active Region Observed in X-Rays. R. G. Teske and E. B. Mayfield. Astrophys. J. Lett. 209, November 1976, L153.

1.126 Doppler Wavelength Shifts of Transition Zone Lines Measured in Skylab Solar Spectra. G. A. Doschek, U. Feldman, and J. D. Bohlin. Astrophys. J. Lett. 205, 1976, L177.

1.127 The Quiet Sun Chromospheric Network Observed from Skylab. U. Feldman, G. A. Doschek, and N. P. Patterson. Astrophys. J. 209, 1976, 270.

1.128 Chromospheric Limb Spectra from Skylab: 2000 to 3200 Å. G. A. Doschek and U. Feldman. Astrophys. J. 210, 1976, 890.

1.129 The Emission Line Spectrum of a Sunspot in the Far Ultraviolet. C. C. Cheng, G. A. Doschek, and U. Feldman. Astrophys. J. 210, 1976, 836.

1.130 The Pressure and Energy Balance of the Cool Corona over Sunspots. P. V. Foukal. Astrophys. J. 210, 1976, 575.

1.131 The Profile of the Solar Lyman Beta Line of Hydrogen. K. R. Nicolas, O. K. Moe, J. D. F. Bartoe, and R. Tousey. J. Geophys. Res. 81, 1976, 3465.

1.132 High Latitude Observations of Solar Wind Streams and Coronal Holes. B. J. Rickett, D. G. Sime, N. R. Sheeley Jr., W. R. Crockett, and R. Tousey. J. Geophys. Res. 81, 1976, 3845.

1.133 Polar Faculae During the Interval 1906-1975. N. R. Sheeley, Jr. J. Geophys. Res. 81, 1976, 3462.

1.134 On the Minimum Variance Direction of Magnetic Field Fluctuations in the Azimuthal Velocity Structure of the Solar Wind. C. V. Solodyna and J. W. Belcher. Geophys. Res. L. 3, 1976, 565.

1.135 Enhancement of Dielectronic Recombination by Plasma Electric Microfields. V. L. Jacobs, J. Davis, and P. C. Kepple. Physical Rev. Lett. 37, 1976, 1390.

1.136 The XUV Spectrum of C I Observed from Skylab During a Solar Flare. U. Feldman, C. M. Brown, G. A. Doschek, C. E. Moore, and F. D. Rosenberg. J. Opt. Soc. Am. 66, 1976, 853.

1.137 Transitions of Zn xxii, Zn xxiii, Zn xxiv, Ge xxiv, and Ge xxv Observed in Laser-Produced Plasmas. W. E. Behring, L. Cohen, G. A. Doschek, and U. Feldman. J. Opt. Soc. Am. 66, 1976, 376.

1.138 Electron Impact Excitation Coefficients for Laboratory and Astrophysical Plasmas. J. Davis, P. C. Kepple, and M. Blaha. J. Quant. Spectrosc. Radiative Transfer 16, No. 12, 1976, 1043.

1.139 Space-Resolved Spectra of Laser-Produced Plasmas in the XUV. U. Feldman, G. A. Doschek, D. K. Prinz, and J. D. Nagel. J. of Appl. Phys. 47, No. 4, 1976, 1341.

1.140 Preliminary Results from the Harvard ATM Calibrated Rocket Program. J. G. Timothy and E. M. Reeves. Progress in Astronautics and Aeronautics, Vol. 48, American Institute of Aeronautics and Astronautics, New York, 1976, pp. 123-149.

1.141 ATM Observations, X-Ray Results. G. S. Vaiana, A. S. Krieger, A. F. Timothy, and M. Zombeck. Astrophysics and Space Science 39, 1976, 75-101.

1.142 The Fogging of Photographic Emulsions Exposed to Metal Surfaces: The Russell Effect. J. H. Underwood. Rev. Sci. Instr. 47, 1976, 644.

1.143 The S056 X-Ray Telescope Experiment on the Skylab-Apollo Telescope Mount. J. H. Underwood, J. E. Milligan, A. C. deLoach, and R. B. Hoover. Appl. Optics, February 1977.

1.144 Exact Green's Function Method of Solar Force-Free Magnetic Field Computations with Constant α, I: Theory and Basic Test Cases. Y. T. Chiu and H. H. Hilton. Ap. J., March 1977.

1.145 Emission Measures, Electron Densities and Nonthermal Velocities from Optically Thin UV Lines Near a Quiet Solar Limb. O. K. Moe and K. R. Nicolas. Astrophys. J. 211, 1977, 579.

1.146 The Influence of Autoionization Accompanied by Excitation on Dielectronic Recombination and Ionization Equilibrium. V. L. Jacobs, J. Davis, P. C. Kepple, and M. Blaha. Astrophys. J. 211, 1977, 605.

1.147 The S-054 X-Ray Telescope Experiment on Skylab. G. S. Vaiana, L. P. Van Speybroech, M. V. Zombeck, A. S. Krieger, J. K. Silk, and A. F. Timothy. Space Sci. Inst. 3, No. 1, 1977.

2. JOURNAL PUBLICATIONS SUBMITTED

2.55 Preliminary Results with Microchannel Array Plates Employing Curved Microchannels to Inhibit Ion-Feedback. J. G. Timothy and R. L. Bybee. Submitted to Rev. Sci. Instr., 1976.

2.56 Plasma Heating by Intense Localized Strong Turbulence. T. Chang, M. Rosenberg, and S. Serio. Submitted to Plasma Physics.

2.57 The MSFC Image Data Processing System – IDAPS. R. M. Wilson, D. L. Teuber, J. R. Watkins, D. T. Thomas, and C. M. Cooper. Submitted to IEEE Computer Magazine.

2.58 The Profile of the 977 Å Line of C III. O. K. Moe, K. R. Nicolas, and J.~D. F. Bartoe. Submitted to Proceedings of the NASA Workshop on the Physical Output of the Sun, 1976.

2.59 Statistical Analysis of Coronal Magnetic Structure During the First Year of Solar Cycle 20. J. T. Nolte and E. C. Roelof. Submitted to J. Geophys. Res.

2.60 Observations of the O_2 Column Density between 120 km and 70 km and Absorption Cross Section in the Vicinity of H-Lyman Alpha. D. K. Prinz and G. E. Brueckner. Submitted to J. Geophys. Res.

2.61 Solar Sources of the Interplanetary Magnetic Field and Solar Wind. R. H. Levine, M. D. Altschuler, and J. W. Harvey. J. Geophys. Res. (in press).

2.62 The 3s-3p and 3p-3d Lines of Mg II Observed above the Solar Limb from Skylab. U. Feldman and G. A. Doschek. Submitted to Astrophys. J. Lett.

2.63 A Search for a Turbulent Free Region in the Solar Transition Zone. U. Feldman and G. A. Doschek. Submitted to Ap. J. Lett.

2.64 Physical Parameters of a Solar Flare as Derived from Skylab X-Ray Data. J. B. Smith Jr., R. M. Wilson, and W. Henze Jr. Submitted to Astrophys J. Lett.

2.65 Dilation of Force-Free Magnetic Flux Tubes. S. Frankenthal. Submitted to Astrophys. J. Lett.

2.66 High Resolution Spectra of the Solar Mg II H and K Lines. G. A. Doschek and U. Feldman. Submitted to Ap. J. Suppl.

2.67 Open Magnetic Structures on the Sun. R. H. Levine, M. D. Altschuler, J. W. Harvey, and B. V. Jackson. Astrophys. J. (in press).

2.68 Observation of a Kink Instability in a Solar Flare. C. C. Cheng. Submitted to Astrophys. J.

2.69 The Emission Spectrum of the Hydrogen Balmer Series Observed above the Solar Limb from Skylab, I. A Quiet-Sun and Polar Coronal Hole. F. D. Rosenberg, U. Feldman, and G. A. Doschek. Submitted to Astrophys. J.

2.70 The Emission Spectrum of the Hydrogen Balmer Series Observed above the Solar Limb from Skylab, II. Active Regions. U. Feldman and G. A. Doschek. Submitted to Astrophys. J.

2.71 Forbidden Lines of the Solar Corona and Transition Zone λλ955 Å - 3000 Å. G. D. Sandlin, G. E. Brueckner, and R. Tousey. Submitted to Astrophys. J.

2.72 Structure and Dynamics of a Solar Flare: X-Ray and XUV Observations. K. P. Dere, D. M. Horan, and R. W. Kreplin. Submitted to Ap. J.

2.73 XUV Spectra of the 15 June 1973 Solar Flare Observed from Skylab, I. Allowed Transition in Chromospheric and Transition Zone Ions. G. A. Doschek, U. Feldman, and F. D. Rosenberg. Submitted to Ap. J.

2.74 XUV Spectra of the 15 June 1973 Solar Flare Observed from Skylab, II. Intersystem and Forbidden Transitions in Transition Zone and Coronal Ions. U. Feldman, G. A. Doschek, and F. D. Rosenberg. Submitted to Ap. J.

2.75 Solar Cycle Variation of Magnetic Flux Emergence. J. M. Davis, L. Golub, and A. S. Krieger. Submitted to Astrophys. J. Lett.

2.76 Hα Macrospicules: Identification with EUV Macrospicules and with Flares in X-Ray Bright Points. R. L. Moore, F. Tang, J. D. Bohlin, and L. Golub. Submitted to Astrophys. J.

2.77 Physical Properties of a Polar Coronal Hole from 2 to 5 $R_{\odot}$. R. H. Munro and B. V. Jackson. Astrophys. J. (in press).

2.78 Coronal Plasma Parameters in a Long Duration X-Ray Event Observed by Skylab. J. A. Vorpahl, E. Tandberg-Hanssen, J. B. Smith, Jr. Astrophys. J. (in press).

2.79 Physical Conditions in the Corona for a Bipolar Magnetic Region. J. A. Vorpahl. Submitted to Ap. J.

2.80 Physical Parameters Defining the Changing Structure of a Coronal Hole. J. A. Vorpahl and R. M. Broussard. Submitted to Ap. J. Lett.

2.81 Bright X-Ray Arcs and the Emergence of Solar Magnetic Flux. G. A. Chapman and R. M. Broussard. Ap. J. (accepted for publication).

2.82 Physical Parameter Determination of the 9 August 1973 Subflare. R. M. Wilson, J. B. Smith, Jr., and D. M. Speich. Submitted to Astrophys. J. Lett.

2.83 A Survey of Soft X-Ray Limb Flare Images: The Relationship Between Their Structure in the Corona and Other Physical Parameters. R. Pallavicini, S. Serio, and G. S. Vaiana. Submitted to Astrophys. J.

2.84 Hydrostatic and Dynamic Models of Solar Coronal Holes. R. Rosner and G. S. Vaiana. Submitted to Astrophys. J.

2.85 Determination of Plasma Parameters from Soft X-Ray Images for Coronal Holes (Open Magnetic Field Configurations) and Coronal Large-Scale Structures (Extended Closed-Field Configurations). C. W. Maxson and G. S. Vaiana. Astrophys. J. (in press).

2.86 An Emerging Flux Model for the Solar Flare Phenomenon. J. Heyvaerts, E. R. Priest, and D. M. Rust. Astrophys. J. (in press).

2.87 The Morphological and Statistical Properties of X-Ray Events with Long Decay Times. S. Kahler. Submitted to Astrophys. J.

2.88 Comparison of a Flaring X-Ray Kernel to a Resistive Merging Model. R. Petrasso, M. Gerassimenko, and J. Nolte. Submitted to Astrophys. J.

2.89 Numerical Image Manipulation and Display in Solar Astronomy. R. H. Levine and J. C. Flagg. Applied Optics (in press).

2.90 The Extreme Ultraviolet Spectroheliometer on ATM. E. M. Reeves, M. C. E. Huber, and J. G. Timothy. Applied Optics (in press).

2.91 Photometric Calibration of the EUV Spectroheliometer on ATM. E. M. Reeves, J. G. Timothy, M. C. E. Huber, and G. L. Withbroe. Applied Optics (in press).

2.92 Thin Aluminum Filters for Use on the Apollo Telescope Mount Extreme Ultraviolet Spectrograph. R. J. Schumacher and W. R. Hunter. Submitted to Applied Optics.

2.93 NRL/ATM Extreme Ultraviolet Solar Image Television Monitor Flown on Skylab. W. R. Crockett, N. P. Patterson, J. D. Purcell, R. J. Schumacher, and R. Tousey. Submitted to Applied Optics.

2.94 The Apollo Telescope Mount of Skylab — An Overview. R. Tousey. Submitted to Applied Optics.

2.95 The Solar XUV Grazing Incidence Spectrograph on Skylab. D. L. Garrett and R. Tousey. Submitted to Applied Optics.

2.96 Exploring the Earth's Atmosphere by Photography from Skylab. D. M. Packer and I. G. Packer. Submitted to Applied Optics.

2.97 The Extreme Ultraviolet Spectrograph ATM Experiment S082B. J. D. F. Bartoe, G. E. Brueckner, J. D. Purcell, and R. Tousey. Submitted to Applied Optics.

2.98 Observing and Recording Instantaneous Images on ATM Television Monitors. N. P. Patterson, R. Tousey, and W. A. Delamere. Submitted to Applied Optics.

2.99 Experience with Schumann-Type XUV Film on Skylab. M. E. VanHoosier, J.~D. F. Bartoe, G. E. Brueckner, N. P. Patterson, and R. Tousey. Submitted to Applied Optics.

2.100 The Extreme Ultraviolet Spectroheliograph ATM Experiment S082A. R. Tousey, J.~D. F. Bartoe, G. E. Brueckner, and J. D. Purcell. Submitted to Applied Optics.

2.101 The Radiance Calibration of the High Altitude Observatory White Light Coronagraph on Skylab. A. I. Poland, J. T. Gosling, R. M. MacQueen, and R. H. Munro. Applied Optics (in press).

2.102 Measurement of Stray Radiance in the High Altitude Observatory's Skylab Coronagraph. A. Csoeke-Poeckh, R. M. MacQueen, and A. I. Poland. Applied Optics (in press).

2.103 Plasma Diagnostics Using High Resolution Spectroscopic Techniques. U. Feldman and G. A. Doschek. Submitted to J. Opt. Soc. of Am.

2.104 Observations of the Birth of a Small Coronal Hole. C. V. Solodyna, A. S. Krieger, and J. T. Nolte. Submitted to Solar Physics.

2.105 On the Nature of Photospheric Magnetic Fields Beneath Large Coronal Holes. S. Frankenthal and A. S. Krieger. Submitted to Solar Physics.

2.106 A Comparison of Positions and Sizes of Sources of Centimeter and X-Ray Bursts. M. R. Kundu, C. E. Alissandrakis, and S. W. Kahler. Solar Physics (in press).

2.107 Low- Energy Particle Events Associated with Sector Boundaries. Z. Svestka, L. Fritzova-Svestkova, J. T. Nolte, H. W. Dodson-Prince, and E. R. Hedeman. Solar Physics (in press).

2.108 Transequatorial Loops Interconnecting McMath Regions 12472 and 12474. Z. Svestka, A. S. Krieger, R. C. Chase, and R. Howard. Solar Physics (in press).

2.109 Magnetic Properties of X-Ray Bright Points. L. Golub, J. W. Harvey, A. S. Krieger, and G. S. Vaiana. Submitted to Solar Physics.

2.110 Comments on Non-Radial Flows in the Solar Wind Problem. R. Rosner and G. S. Vaiana. Submitted to Solar Physics.

2.111 Observations of Spatial and Temporal Variations in X-Ray Bright Point Emergence Patterns. L. Golub, A. S. Krieger, and G. S. Vaiana. Solar Physics (in press).

2.112 High Coronal Structure of High Velocity Solar Wind Stream Sources. J. T. Nolte, A. S. Krieger, E. C. Roelof, and R. E. Gold. Solar Physics (in press).

2.113 Do Changes in Coronal Emission Structure Imply Magnetic Reconnection? J. T. Nolte, M. Gerassimenko, A. S. Krieger, R. D. Petrasso, Z. Svestka, and D. G. Wentzel. Submitted to Solar Physics.

2.114 The Quantitative Properties of Three Soft X-Ray Flare Kernels Observed with the AS&E X-Ray Telescope on Skylab. S. W. Kahler, R. D. Petrasso, and S. R. Kane. Solar Physics (in press).

2.115 The Spatial Structure of a Solar Flare in Soft X-Rays and Centimetric Wavelengths. R. Pallavicini and G. S. Vaiana. Solar Physics (in press).

2.116 Association of X-Ray Arches with Chromospheric Neutral Lines. P. S. McIntosh, A. S. Krieger, J. T. Nolte, and G. Vaiana. Solar Physics (in press).

2.117 Reply to "Observations of the Structure and Evolution of Solar Flares with a Soft X-Ray Telescope" by J. A. Vorpahl et al. S. W. Kahler, A. S. Krieger, and G. S. Vaiana. Submitted to Solar Physics.

2.118 Analysis of X-Ray Observations of the 15 June 1973 Flare in Active Region NOAA 131. K. R. Krall, E. J. Reichmann, E. Tandberg-Hanssen, R. M. Wilson, W. Henze Jr., and J. B. Smith Jr. Submitted to Solar Physics.

2.119 Polarized Intensity Patterns of a Sunspot. M. J. Hagyard, E. A. West, and N. P. Cumings. Solar Physics (in press).

2.120 Computer Solutions for Studying Correlations Between Solar Magnetic Fields and Skylab X-Ray Observations. D. Teuber, E. Tandberg-Hanssen, and M. Hagyard. Solar Physics (in press).

2.121 A Long-Lived Coronal Arch System Observed in X-Rays. J. P. McGuire, E. Tandberg-Hanssen, K. R. Krall, S. T. Wu, J. B. Smith, and D. M. Speich. Solar Physics (in press).

2.122 Observations of Limb Flares with a Soft X-Ray Telescope. E. G. Gibson. Submitted to Solar Physics.

2.123 The Analysis of Solar X-Ray Photographs, I: General Methods. J. H. Underwood and D. L. McKenzie. Submitted to Solar Physics.

2.124 A Survey of Coronal Hole Observations and Their Solar Wind Associations throughout Sunspot Cycle 20. R. M. Broussard, J. H. Underwood, R. Tousey, and N. R. Sheeley, Jr. Submitted to Solar Physics.

2.125 The Analysis of Solar X-Ray Photographs, II: Estimate of Errors. L. A. Christopher, J. H. Underwood, and E. B. Mayfield. Submitted to Solar Physics.

2.126 Expansion of an X-Ray Coronal Arch into the Outer Corona. D. M. Rust and E. Hildner. Solar Physics (in press).

2.127 White Light and Radio Studies of the Coronal Transient of 14-15 September 1973, I: Material Motions and Magnetic Field. G. A. Dulk, S. F. Smerd, R. MacQueen, J. T. Gosling, A. Magun, R. T. Stewart, K. V. Sheridan, R. D. Robinson, and S. Jacques. Solar Physics (in press).

2.128 The Physical Nature of Interconnecting Coronal Loops. Z. Svestka. Submitted to Solar Physics.

2.129 Development of a Complex of Activity in the Solar Corona. R. Howard and Z. Svestka. Submitted to Solar Physics.

2.130 A Pictorial Comparison of Interplanetary Magnetic Field Polarity, Solar Wind Speed, and Geomagnetic Disturbance Index During the Sunspot Cycle. N. R. Sheeley Jr., J. R. Asbridge, S. J. Bame, and J. W. Harvey. Submitted to Solar Physics.

2.131 The Thermal and Non-Thermal Flare: A Result of Non-Linear Threshold Phenomena During Magnetic Field Line Reconnection. D. S. Spicer. Submitted to Solar Physics.

2.132 Comparison of Flare Bremsstrahlung Resulting from Energetic Thermal and Non-Thermal Electrons. J. Davis and J. E. Rogerson. Submitted to Solar Physics.

2.133 Solar XUV Emission Line Profiles of Si II and Si III and Their Center to Limb Variations. K. R. Nicolas, G. E. Brueckner, R. Tousey, D. A. Tripp, O. R. White, and R. G. Athay. Submitted to Solar Physics.

2.134 Multiple Loop Activations and Continuous Energy Release in the Solar Flare of 1973 June 15. K. G. Widing and K. P. Dere. Submitted to Solar Physics.

2.135 Emission Measures and Structure of the Transition Region of a Sunspot from Emission Lines in the Far Ultraviolet. C. C. Cheng and O. K. Moe. Submitted to Solar Physics.

2.136 Extreme-Ultraviolet Observations of Coronal Holes, I: Locations, Sizes, and Evolution of Coronal Holes June 1973 - January 1974. J. D. Bohlin. Submitted to Solar Physics.

2.137 A Comment on the Acceleration of Charged Particles in the Presence of Micro-Turbulence as Related to Solar Flares. D. S. Spicer. Submitted to Solar Physics.

2.138 High Resolution Mapping of the Magnetic Field of the Solar Corona. M. D. Altschuler, R. H. Levine, M. Stix, and J. Harvey. Solar Physics (in press).

2.139 Radio and EUV Observations of a Coronal Hole. G. A. Dulk, K. V. Sheridan, S. F. Smerd, and G. L. Withbroe. Submitted to Solar Physics.

2.140 Physics of an Active Region Loop System. R. H. Levine and G. L. Withbroe. Solar Physics (in press).

2.141 EUV Analysis of Polar Plumes. I. A. Ahmad and G. L. Withbroe. Solar Physics (in press).

2.142 The Prominence-Corona Interface Compared with the Chromosphere-Corona Transition Region. F. Q. Orrall and E. J. Schmahl. Solar Physics (in press).

2.143 The Chemical Composition of the Photosphere and Corona. G. L. Withbroe. Submitted to Solar Physics.

2.144 Active Region Flare Rates and 8.6 mm Brightness Temperatures. G. L. Withbroe and J. E. Vernazza. Solar Physics (in press).

3. OTHER PUBLICATIONS

3.61 A New Sun (Introduction). E. G. Gibson. To be published by NASA.

3.62 Methods of Imaging X-Ray Astronomy and the X-Ray Spectroheliograph on ATM. G. S. Vaiana. Space Optics, Proc. of the CIO/CNES Summer School at Marseilles, 29 June - 4 July 1970, Ed. Marechal and Courts, Gordon & Breach, London, pp. 295-337.

3.63 New Developments in Solar Research. R. W. Noyes. Frontiers of Astrophysics, E. H. Avrett, ed., Harvard University Press, Cambridge, Mass., pp. 41-94.

3.64 An Observational Definition of Coronal Holes. J. D. Bohlin. Skylab Workshop Monograph on Coronal Holes, Chapter 2, to be published under auspices of HAO, J. B. Zirker, ed.

3.65 Large Scale Solar Magnetic Fields and Coronal Holes. R. H. Levine. Skylab Workshop Monograph on Coronal Holes, Chapter 4, to be published under auspices of HAO, J. B. Zirker, ed.

3.66 La Corona Solare in Raggi X: Immagini Dallo Skylab. G. S. Vaiana. Annuario Della Enciclopedia Della Scienza E Della Tecnica, Ed. A. Mondadori, Miland, 1974, pp. 279-290.

3.67 Solar X-Ray Emission. G. Vaiana and W. Tucker. X-Ray Astronomy, Ed. Giacconi and Gursky, D. Reidel, Dordrecht-Holland, 1974, Chapter 5, pp. 169-205.

3.68 Resultate der Skylab-Sonnenbeobachtungen. M. C. E. Huber. Forschung und Technik, Mittwoch, 3 September 1975, No. 203, 45.

3.69 Data Handbook for the Harvard EUV Spectroheliometer on ATM. W. Harby and E. M. Reeves. Harvard College Observatory Report, 1975.

PRECEDING PAGE BLANK NOT FILMED.

3.70 Data Analysis Guide to the ATM S-054 X-Ray Spectrographic Telescope. AS&E report No. 3794, American Science and Engineering, Inc., 1975.

3.71 Electron Impact Rate Coefficients for Ions of Solar Interest. P. C. Kepple, J. Davis, and M. Blaha. NRL Memorandum Report 3171, 1975.

3.72 Reticulation, Effects and Cure. A. I. Poland and J. T. Gosling. AAS Photo. Bull. No. 2, Vol. 9, 1975.

3.73 Active Region Flare Rates and 8.6 mm Brightness Temperatures, II. G. L. Withbroe and J. E. Vernazza. AFCRL Scientific Report AFCRL-TR-75-0563.

3.74 Atlas of Coronal Hole Boundaries from Observations Made Prior to the Skylab Mission. J. H. Underwood and R. M. Broussard. Skylab Workshop on Coronal Holes, 23 February 1976 [Aerospace Corp. Report No. ATR76(7405)].

3.75 Final Report on Coronagraph Feasibility Studies for an Out-of-Ecliptic Mission. J. D. Bohlin, R. A. Howard, M. J. Koomen, and J. D. Michels. Phase A Final Review of a Joint ESA/NASA Out-of-Ecliptic Mission, ESA Headquarters, 6-7 April 1976, Paris, France.

3.76 Flare Atlas and User's Instruction Guide for NRL Flare Date of 15 June, 5 and 7 September 1973. V. E. Scherrer and G. D. Sandlin. NRL Instruction Book No. 161, May 1976.

3.77 NRL/ATM User's Guide to Experiment S082A. I. G. Packer, N. P. Patterson, S. A. Mango, and R. Tousey. NRL Memorandum Report No. 3410, November 1976.

3.78 Holes in the Corona. J. D. Bohlin. Natural History 85, 1976, pp. 69-70.

3.79 Solar Flares. Z. Svestka. D. Reidel Publishing Co., Dordrecht-Holland, 1976.

3.80 A Spectral Atlas of the Sun Between 1175 and 2100. O.K. Moe, M. E. VanHoosier, J.~D. F. Bartoe, and G. E. Brueckner. NRL Report No. 8057, 1976.

3.81 An Unstable Arch Model of a Solar Flare. D. S. Spicer. NRL Report No. 8036, 1976.

3.82 Solar Flares. Z. Svestka. D. Reidel Publishing Co., Dordrecht-Holland, 1976.

3.83 Atlas of Skylab ATM/S-056 Super-Long Exposures and Stepped-Image Frames. R. M. Wilson. NASA TM X-64992, 1976.

3.84 Atlas of Skylab ATM/S-056 Coronal Hole Observations. R. M. Wilson. NASA TM X-64992, 1976.

3.85 A Solar Flare Bibliography for 1973 through 1975. J. P. McGuire. NASA TM X-73312, 1976.

3.86 Addendum to "A Solar Flare Bibliography for 1973 through 1975." J. P. McGuire, 1976.

3.87 Results of Coronal Hole Research: An Overview. R. M. Wilson. NASA TM X-73317, 1976.

3.88 The Skylab ATM/S-056 X-Ray Event Analyzer: Instrument Description, Parameter Determination, and Analysis Example (15 June 1973 1B/M3 Flare). R. M. Wilson. NASA TM X-73332, 1976.

3.89 Compilation of Flares and Transients Observed by the S-056 Solar X-Ray Telescope During the Skylab Missions. D. M. Speich, J. B. Smith Jr., E. J. Reichmann, J. P. McGuire, J. H. Underwood, J. A. Vorpahl, and D. L. McKenzie. NASA TM X-73346, 1976.

3.90 The 15 June 1973 1B/M3 Flare: An Overview of Analysis Results. R. M. Wilson. NASA TM X-73357, 1976

3.91 Skylab ATM/S-056 X-Ray Event Analyzer Observations Versus Solar Flare Activity: An Event Compilation. R. M. Wilson. NASA TM X-73363, 1977.

3.92 A Long-Lived Coronal X-Ray Arcade. J. P. McGuire, E. Tandberg-Hanssen, K. R. Krall, S. T. Wu, J. B. Smith, and D. M. Speich. NASA TM X-73362, 1977.

4. PRESENTATIONS — NATIONAL AND INTERNATIONAL MEETINGS

4.285 Chromospheric Force-Free Magnetic Fields Associated with Bi-Polar Sunspot Groups. R. X. Meyer and E. B. Mayfield, 139th AAS, Las Cruces, New Mexico, January 9-12, 1973; Bull. AAS 5, 1973, 277.

4.286 Stability of Chromospheric Force-Free Fields Associated with Bi-Polar Sunspot Groups. R. X. Meyer. Int. Congress on Waves and Instabilities in Plasmas, Innsbruck, Austria, April 2-7, 1973.

4.287 The Temperature Structure of a Coronal Active Region. A. B. C. Walker, Jr.; E. B. Mayfield, D. L. McKenzie, and J. H. Underwood. AAS Solar Physics Div., Honolulu, Hawaii, January 9-11, 1974; Bull. AAS 6, 1974, 296.

Discussion Meeting on the Physics of the Solar Atmosphere, The Royal Society, London, January 14-15, 1975; Phil. Trans. Roy. Soc. London A, 281, 1976:

4.288 The X-Ray Corona from Skylab (Invited paper). G. S. Vaiana. Phil. Trans. Roy. Soc. London A 281, 1976, 365-374.

4.289 Optical Observations of Flares. Z. Svestka. Phil. Trans. Roy. Soc. London A 281, 1976, 435.

4.290 Observations of Flare-Associated Magnetic Field Changes. D. M. Rust. Phil. Trans. Roy. Soc. London A 281, 1976, 427.

4.291 Optical and Magnetic Measurements of the Photosphere and Low Chromosphere. D. M. Rust. Phil. Trans. Roy. Soc. London A 281, 1976, 353.

4.292 The Quiet Sun in the Extreme Ultraviolet. E. M. Reeves, J. E. Vernazza, and G. L. Withbroe. Phil. Trans. Roy. Soc. London A 281, 1976, 319.

4.293 Emerging Flux Regions Observed by S-056. J. A. Vorpahl. Solar Physics Div., AAS, Boulder, Colorado, January 19-27, 1975.

PRECEDING PAGE BLANK-NOT FILMED

4.294 X-Ray Observations of Solar Active Regions from Skylab (Invited paper). G. S. Vaiana. High Energy Astrophysics Div. Meeting, 146 AAS, San Diego, California, August 17-20, 1975.

Flare Build-Up Study Workshop, Falmouth, Massachusetts, September 8-11, 1975:

4.295 Energy Storage and Deposition in a Solar Flare (Invited paper). J. A. Vorpahl. Solar Physics 47, 1976, 147.

4.296 Evidence for Magnetic Energy Storage in Coronal Active Regions. A. S. Krieger, L. D. DeFeiter, and G. S. Vaiana.

4.297 Observation Support for Active Role of Magnetic Field in Solar Flares (Invited paper). D. Rust.

4.298 Preflare X-Ray Morphology of Active Regions Observed with the AS&E Telescope on Skylab. S. W. Kahler and B. J. Buratti.

4.299 The Location of the Site of Energy Release in an X-Ray Flare-Like Brightening. R. D. Petrasso and A. S. Krieger.

4.300 What Should Be Observed on the Sun? Z. Svestka.

4.301 Energy Released by the Interaction of Coronal Magnetic Fields. N. R. Sheeley, Jr.

17th Meeting Plasma Physics Division, American Physical Society, St. Petersburg, Florida, November 1975:

4.302 Particle Acceleration in Strongly Turbulent Plasma. S. Serio, M. Rosenberg, and T. Chang.

4.303 Application of Astronomical X-Ray Imaging Techniques to Laboratory Plasma Diagnostics. J. K. Silk, R. C. Chase, and A. S. Krieger.

4.304 Evidence for Magnetic Field Line Reconnection in the Lower Corona. N. R. Sheeley, Jr., and R. Tousey. Fall Annual Meeting, American Geophysical Union, San Francisco, California, December 8-12, 1975; EOS Transactions 56, 1975, 1049.

4.305 Polar Transients Observed in the EUV. G. L. Withbroe and D. T. Jaffe. Bull. AAS 7, 1975, 354.

First Topical Conference on Diagnostics of High Temperature Plasmas, American Physical Society, Knoxville, Tennessee, January 7-9, 1976:

4.306 Application of Astronomical X-Ray Imaging Techniques to Laboratory Plasma Diagnostics. J. K. Silk, R. C. Chase, and A. S. Krieger.

4.307 Extreme Ultraviolet Spectroheliograph for Plasma Diagnostics. V. E. Scherrer, J. D. Purcell, and G. D. Sandlin.

4.308 Magnetic Variability in the Sun's Atmosphere. R. W. Noyes. Magnetically Varying Sun and Its Effect on Terrestrial Climate, AAS Meeting, Boston, Massachusetts, February 1976.

4.309 The Chemical Composition of the Solar Atmosphere: How Well Is It Determined? (Invited Paper). G. L. Withbroe. American Geophysical Union, Washington, D. C., April 1976.

Spring Meeting, American Physical Society, Washington, D. C., April 26-29, 1976:

4.310 Highly Ionized Atoms in Astrophysics (Invited paper). A. K. Dupree. Bull. Am. Phys. Soc. 21, 1976, 509.

4.311 Diagnostics for Plasma Temperatures in the Spectrum 171-630 Å. V. E. Scherrer and G. D. Sandlin. Bull. Am. Phys. Soc. 21, 1976, 598.

U.S.-Japan Cooperative Seminar on High Energy Phenomena in Solar Flares, Tokyo, Japan, May 10-13, 1976:

4.312 Spectroscopic Ultraviolet Observations of Flares from Skylab. G. E. Brueckner.

4.313 Skylab Spectroheliograph Observations of the Double Ribbon Flare of 1973 June 15. K. G. Widing.

4.314 U. S. Space Observatories, EUV Observations (Invited paper). E. M. Reeves.

4.315 Space Observations of Flares in Soft X-Rays, (b) The Thermal Flare. Z. Svestka.

American Geophysical Union International Symposium on Solar-Terrestrial Physics, Boulder; Colorado, June 7-18, 1976:

4.316 The Physical Properties of Coronal Holes. J. D. Bohlin.

4.317 Development of Solar Active Regions. Z. Svestka.

4.318 The Locations, Sizes, and Evolution of Coronal Holes. J. D. Bohlin.

4.319 Transient Frequency versus Solar Activity. E. Hildner.

XIX COSPAR Meeting, Philadelphia, Pennsylvania, June 8-19, 1976:

4.320 High Spatial Resolution UV Spectra of the Sun: The Dynamics of the Transition Zone. G. E. Brueckner, J.~D. F. Bartoe, O. K. Moe, K. R. Nicolas, and M. E. Van Hoosier.

4.321 Spectrophotometry of the Photospheric and Chromospheric Granulation in the UV Region 1240-1650 Å. J.~D. F. Bartoe, G. E. Brueckner, O. K. Moe, K. R. Nicolas, and M. E. Van Hoosier.

148th General Meeting of the AAS, Haverford, Pennsylvania, June 21-25, 1976:

4.322 Amplitude Instability and Stochastic Behavior During Magnetic Field Line Reconnection. D. S. Spicer. Bull. AAS 8, 1976, 373.

4.323 Analysis of Selected Solar Features from X-Ray Filtergrams. J. B. Smith, Jr., J. H. Underwood, D. L. McKenzie, and E. J. Reichmann. Bull. AAS 8, 1976, 317.

4.324 Bright X-Ray Arcs and the Emergence of Solar Magnetic Flux. G. A. Chapman and R. M. Broussard. Bull. AAS 8, 1976, 317.

4.325 Changes in Coronal Holes and the Accompanying Magnetic Fields. R. M. Broussard and J. A. Vorpahl. Bull. AAS 8, 1976, 326.

4.326 Coronal Lines in ATM Spectra 1100-3000 Å. G. D. Sandlin, G. E. Brueckner, and R. Tousey. Bull. AAS 8, 1976, 339.

4.327 Correlation of X-Ray Flux Variations with Magnetic Energy for a Solar Active Region. M. J. Hagyard, J. R. Watkins, R. M. Wilson, K. R. Krall, J. B. Smith, Jr., and D. M. Speich. Bull. AAS 8, 1976, 317.

4.328 Densities in the Solar Chromosphere Above the Quiet Sun and a Coronal Hole Derived from the Hydrogen Balmer Lines. F. D. Rosenberg, U. Feldman, G. A. Doschek. Bull. AAS 8, 1976, 338.

4.329 Do Changes in Coronal Emission Structure Imply Magnetic Reconnection? J. Nolte, M. Gerassimenko, A. Krieger, R. Petrasso, and D. Wentzel. Bull. AAS 8, 1976, 367.

4.330 Emergence of Small-Scale Magnetic Fields on the Sun. L. Golub, A. S. Krieger, and G. S. Vaiana. Bull. AAS 8, 1976, 333.

4.331 Energy and Material Loss in the Decay of an X-Ray Flare. J. K. Silk, S. W. Kahler, A. S. Krieger, and G. S. Vaiana. Bull. AAS 8, 1976, 375.

4.332 Enhancements of Soft X-Ray Emission Associated with the Motion of Cool Material through the Lower Corona. D. M. Rust and D. F. Webb. Bull. AAS 8, 1976, 316.

4.333 Evolutionary Trends in the Development of Coronal Holes and Their Relationship to the Sub-Photospheric Magnetic Field. J. M. Davis and L. Golub. Bull. AAS 8, 1976, 326.

4.334 Exact Green's Function Method of Solar Force-Free Magnetic Field Computations with Constant α: Theory and Basic Test Cases. Y. T. Chiu and H. H. Hilton. Bull. AAS 8, 1976, 370.

4.335 Expansion of an X-Ray Coronal Arch into the Outer Corona. D. M. Rust and E. Hildner. Bull. AAS 8, 1976, 368.

4.336 Identification of H-Alpha Macrospicules with EUV Macrospicules and with Flares in X-Ray Bright Points. R. L. Moore, F. Tang, J. D. Bohlin, and L. Golub. Bull. AAS 8, 1976, 333.

4.337 Large-Scale Changes in Coronal Hole Boundaries. J. T. Nolte, M. Gerassimenko, A. S. Krieger, and C. V. Solodyna. Bull. AAS 8, 1976, 557.

4.338 A Long Duration X-Ray Event Observed by Skylab on 13-14 August 1973. J. A. Vorpahl, J. B. Smith, Jr., and E. Tandberg-Hanssen. Bull. AAS 8, 1976, 316.

4.339 Low-Energy Particle Events Associated with Sector Boundaries. L. Fritzova-Svestkova.

4.340 The Morphology and Evolution of Long Decay Soft X-Ray Events Observed with the S-054 X-Ray Experiment on Skylab. S. Kahler, A. S. Krieger, and G. S. Vaiana. Bull. AAS 8, 1976, 316.

4.341 Multiple Loop Activations and Continuous Energy Release in a Solar Flare. K. G. Widing. Bull. AAS 8, 1976, 375.

4.342 Observation of a Kink Instability in a Solar Flare. C. C. Cheng. Bull. AAS 8, 1976, 373.

4.343 Open Magnetic Structures in the Sun. R. H. Levine, M. D. Altschuler, and J. W. Harvey. Bull. AAS 8, 1976, 326.

4.344 Physical Properties and Energy Analysis of the 15 June 1973 Flare Based on Skylab Operations. W. Henze, K. R. Krall, E. J. Reichmann, R. M. Wilson, and J. B. Smith, Jr. Bull. AAS 8, 1976, 375.

4.345 A Polar Coronal Hole: I. The Three Dimensional Boundary. B. V. Jackson.

4.346 A Polar Coronal Hole: II. Three Dimensional Density Distribution. R. H. Munro. Bull. AAS 8, 1976, 325.

4.347 Pre-Flare Observations During the Evolution of McMath Region 12474 August 7-9, 1973. V. Scherrer, G. Brueckner, G. Sandlin, and R. Tousey. Bull. AAS 8, 1976, 373.

4.348 Preliminary Analysis of NRL Rocket Spectra of the Lα Line Wings. G. Basri, J.~D. F. Bartoe, G. Brueckner, J. Linsky, and M. E. Van Hoosier. Bull. AAS 8, 1976, 331.

4.349 Preliminary Analysis of NRL Skylab Spectroheliograms in Lines of He I and He II. S. Mango, J. D. Bohlin, D. Glackin, and J. Linsky. Bull. AAS 8, 1976, 332.

4.350 Properties of Soft X-Ray Flare Kernels and Their Role in the Solar Flare Process. R. S. Kane, S. W. Kahler, and R. D. Petrasso. Bull. AAS 8, 1976, 374.

4.351 Recent Progress in Soft X-Ray Solar Observations (Invited paper). A. Krieger. AAS Solar Physics Division Mini Symposium. Bull. AAS 8, 1976, 376.

4.352 Results of Analysis of Correlative Observations of the 21 August 1973 EPL. R. M. Wilson, E. Tandberg-Hanssen, J. B. Smith, Jr., D. M. Speich, S. T. Wu, and R. S. Steinolfson. Bull. AAS 8, 1976, 369.

4.353 Soft X-Ray Emission Changes Near Coronal Hole Boundaries. C. V. Solodyna, J. T. Nolte, and A. S. Krieger. Bull. AAS 8, 338.

4.354 Spectrophotometry of the Photospheric and Chromospheric Granulation in the UV Region 1240-1650 Å. J.~D. F. Bartoe, G. E. Brueckner, O. K. Moe, K. R. Nicolas, and M. E. Van Hoosier. Bull. AAS 8, 1976, 312.

4.355 The Speeds of Coronal Mass Ejection Events. E. Hildner, R. M. MacQueen, R. H. Munro, A. I. Poland, C. L. Ross, and J. T. Gosling. Bull. AAS 8, 1976, 36.

4.356 The Temperature Structure of the Lower Corona. E. J. Schmahl. Bull. AAS 8, 1976, 369.

4.357 Temporal Changes in Equatorial Corona. R. M. MacQueen.

4.358 Time Dependent Ionization and Radiation of a Gas Moving through the Solar Transition Zone. O. K. Moe. Bull. AAS 8, 1976, 331.

4.359 Time History of Thermal Energy Content in a Coronal Condensation Observed in X-Rays. R. G. Teske and E. B. Mayfield. Bull. AAS 8, 1976, 368.

4.360 The UV Spectrum of a Sunspot (1175 to 1700 Å) Observed with High Spatial and Spectral Resolution. G. E. Brueckner, K. R. Nicolas, J.~D. F. Bartoe, and M. E. Van Hoosier. Bull. AAS 8, 1976, 345.

XVI General Assembly of the IAU Commission 14, Grenoble, France, August 27, 1976:

4.361 The Thermal and Non-Thermal Flare: A Result of Non-Linear Threshold Phenomena. D. S. Spicer.

4.362 Analyses of Laboratory Spectra of Special Interest for the Interpretation of Ultraviolet Stellar Spectra. C. Moore-Sitterly and K. Widing.

4.363 Multiple Loop Activations and Continuous Energy Release in a Solar Flare. K. G. Widing.

4.364 Flare Results from Skylab. S. Kahler.

4.365 Coronal Activity During Skylab. R. M. MacQueen.

4.366 Observations of Limb Flares by the S-054 X-Ray Telescope Onboard Skylab. R. Pallavicini, S. Serio, and G. S. Vaiana.

4.367 Comments Regarding Energy Release and Transfer in Solar Flares. J. A. Vorpahl.

4.368 X-Ray and UV Observations of Stellar Coronae. A. K. Dupree. Invited Review Commission 44, Astronomical Observations Above the Earth's Atmosphere.

IAU Colloquium No. 36, Nice, France, September 6-10, 1976:

4.369 Fine Structure of the Solar Atmosphere from the Temperature Minimum into the Corona. G. E. Brueckner and J.~D. F. Bartoe.

4.370 Heating of the Solar Corona by Transient Events. D. M. Rust.

4.371 Physical Conditions in the Solar Corona During Flarelike Events. J. A. Vorpahl. Invited Review, Leningrad Seminar, Active Processes on the Sun, September 22-24, 1976.

4.372 Comments Regarding Energy Release and Transfer in Solar Flares. J. A. Vorpahl. Proceedings of VIII Leningrad Seminar, September 22-24, 1976.

4.373 Spectroscopic Diagnostics of the Solar Plasma (Invited paper). A. K. Dupree. Optical Society of America Symposium on Highly Ionized Atoms, Tucson, Arizona, October 1976.

4.374 High Coronal Structure of High Velocity Solar Wind Stream Sources. J. T. Nolte, A. S. Krieger, E. C. Roelof, and R. E. Gold. Fall AGU Meeting, 1976.

Comun. LXI Congresso SIF Boll, 1976, SIF 109:

4.375 Risultati Sperimentali E Modello Idrodinamico Di Transienti Del Plasma Della Corona Solare Confinato Da Campo Magnetico. G. Peres, R. Rosner, S. Serio, and G. S. Vaiana. SIF 109, 1976, p. 41.

4.376 Cavita X E Formazione Delle Protuberanze. G. Godoli, S. Motta, V. Pirronello, R. A. Zappala, S. Serio, and G. S. Vaiana. SIF 109, 1976, p. 42.

4.377 Cavita X E Attivita Delle Protuberanze. G. Godoli, S. Motta, V. Pirronello, R. A. Zappala, S. Serio, and G. S. Vaiana. SIF 109, 1976, p. 42.

149th Meeting of AAS, Honolulu, Hawaii, January 16-19, 1977:

4.378 Observations of Coronal Holes throughout Sunspot Cycle 20. R. M. Broussard, J. H. Underwood, R. Tousey, and N. R. Sheeley, Jr.

4.379 Large-Scale Changes in Coronal Hole Boundaries. J. T. Nolte, M. Gerassimenko, A. S. Krieger, and C. V. Solodyna.

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4.381 The Structure and Fluctuations of A Coronal Streamer. A. I. Poland.

4.382 The Coronal Emission Line Transient of 20 April 1976. R. Fisher.

4.383 Coronal Mass Ejections Observed at 1 AU? E. Hildner and J. T. Gosling.

4.384 Physical Conditions in the 5 September 1973 Flare from Skylab X-Ray Observations. W. Henze. Bull. AAS 8, 1977, 556.

4.385 Analyses and Interpretation of Solar X-Ray Photographs. J. H. Underwood and D. L. McKenzie. Bull. AAS 8, 1977, 557.

4.386 Low-Energy Particle Events Associated with Sector Boundaries. Z. Svestka, L. Fritzova-Svestkova, J. T. Nolte, H. W. Dodson-Prince, and E. R. Hedeman. Bull. AAS 8, 1977, 370.

AAS/AGU/APS Joint Symposium on Solar and Interplanetary Physics, Tucson, Arizona, January 12-15, 1977:

4.387 Polar Plumes and the Solar Wind Mass Flux. I. A. Ahmad.

4.388 The Origin of Coronal Holes and a Hypothesis for Their Occurrence During the Solar Cycle. J. D. Bohlin

4.389 ATM Skylab Observations of Flare Lyman-α Line Profiles. R. C. Canfield and M. E. Van Hoosier.

4.390 Axisymmetric Magnetic Fields in Magnetohydrostatic Equilibrium. R. H. Comfort, E. Tandberg-Hanssen, and S. T. Wu.

4.391 Two-Dimensional MHD Modeling of the Transient Inner Corona — A Progress Report. M. Dryer, S. T. Wu, Y. Nakagawa, and S. M. Han.

4.392 X-Ray Bright Points at Solar Minimum. L. Golub, J. M. Davis, and A. S. Krieger.

4.393 Polarized Intensity Patterns of a Sunspot. M. J. Hagyard, E. A. West, and N. P. Cumings.

4.394 Time Varying Oscillations in the Solar Soft X-Ray Flux Observed from Skylab. W. Henze, D. Teuber, J. R. Watkins, and R. M. Wilson.

4.395 Coronal Mass Ejections Observed at 1 AU? E. Hildner.

4.396 Development of a Complex of Activity in the Solar Corona. R. Howard and Z. Svestka.

4.397 The Decay of Coronal Loops Brightened by Flares and Transients. A. S. Krieger.

4.398 Open Magnetic Structures and Solar Energetic Particles During Skylab. R. H. Levine and E. C. Roelof.

4.399 Coronal Transients: Arches or Bubbles? R. H. Munro.

4.400 Short Term Evolution of Coronal Hole Boundaries. J. T. Nolte, M. Gerassimenko, A. S. Krieger, and C. V. Solodyna.

4.401 Comparison of a Flaring X-Ray Kernel to a Resistive Merging Model. R. Petrasso, M. Gerassimenko, and J. Nolte.

4.402 An Emerging Flux Model for the Solar Flare. D. M. Rust, J. Heyvaerts, and E. R. Priest.

4.403 A Survey of Coronal Holes and Their Solar Wind Associations throughout Sunspot Cycle 20. N. R. Sheeley, Jr., R. Tousey, R. M. Broussard, and J. H. Underwood.

4.404 Coronal Changes Associated with the Emergence of Magnetic Flux. J. B. Smith, Jr., S. T. Wu, K. Krall, and E. Tandberg-Hanssen.

4.405 Model of a Long-Lived X-Ray Arch. R. S. Steinolfson, S. T. Wu, and J. P. McGuire.

4.406 The Physical Nature of Interconnecting Coronal Loops. Z. Svestka.

4.407 The Association of Non-Thermal Accelerated Electrons with "Non-Flaring" H-Alpha Filament Disappearances and Coronal Transients. D. Webb and M. Kundu.

4.408 Spicule Production Due to Excess Network Heating. S. T. Wu, E. Tandberg-Hanssen, and J. O. Stenflo.

4.409 A Random Walk through the Results of the Solar Experiments of the Skylab Mission. J. D. Bohlin. National Capital Section of Optical Society of America, Washington, D. C., January 25, 1977.

APS Topical Conference on Atomic Processes in High Temperature Plasmas, Knoxville, Tennessee, February 16-18, 1977:

4.410 X-Ray Spectral Analysis of the Decay of a Solar X-Ray Flare. J. K. Silk, I. Little-Marenin, and A. S. Krieger.

4.411 Enhancement of Dielectronic Recombination by Plasmas. V. L. Jacobs, J. Davis, and P. C. Kepple.

4.412 The Influence of Metastable Levels on the Oxygen Impurity Radiation from Flare-Like Plasmas. J. E. Rogerson, J. Davis, and V. L. Jacobs.

4.413 EUV Solar Spectroscopy from Skylab and Some Implications for Atomic Physics. E. M. Reeves and A. K. Dupree. Proceedings of the Fourth International Conference on Beam-Foil Spectroscopy 1, 1976, Plenum Press, New York, pp. 885-905.

4.414 Recenti Risultati Di Fisica Solare (Invited paper). G. S. Vaiana. XX Congresso S. A. IT, Frascati, Italy.

4.415 Identificazione Di Due Classi Di Brillamenti X Mediante Osservazioni Di Eventi Al Bordo Con Lo Esperimento, Skylab S-054. R. Pallavicini, S. Serio, and G. S. Vaiana. Proceedings XX Meeting Soc. Astron. Italiana, Mem. Soc. Astron. Italiana.

5. OTHER PRESENTATIONS

5.92 Preliminary Results from the S-056 Experiment. J. H. Underwood. NASA/JSC, Houston, Texas, January 24, 1974.

5.93 Analysis of Spatially Resolved Soft X-Ray (Photographic) Data Obtained by the Skylab/ATM Borne S-056 Telescope. J. B. Smith, Jr. Lund University, Lund, Sweden, 1975.

5.94 Solar X-Ray Astronomy from Skylab. G. S. Vaiana. University of Wisconsin Physics Department, Madison, Wisconsin, March 14, 1975.

5.95 The Solar X-Ray Corona: New Insights from Skylab. G. S. Vaiana. Center for Astrophysics, Cambridge, Massachusetts, April 10, 1975.

5.96 Solar X-Radiation Observed by Skylab. J. A. Vorpahl. Colloquium, University of California Irvine, Irvine, California, October 15, 1975.

5.97 X-Ray Telescope Observations of the Solar Corona. J. H. Underwood. Seminar, University of Michigan, November 25, 1975.

5.98 The Physics of Solar Flares. Z. Svestka. Goddard Space Flight Center, Greenbelt Maryland; and Boston University, January 1976.

5.99 Some Aspects of Skylab. C. Moore-Sitterling. Eistophos Science Club, Washington, D. C., January 9, 1976.

5.100 Some Recent Results from S-056 X-Ray Telescope on Skylab. R. M. Broussard. Solar Neighborhood Meeting, Space Science Laboratory, University of California, Berkeley, California, January 16, 1976.

5.101 Colloquium. R. M. MacQueen. AS&E, Inc., Cambridge, Massachusetts, January 21, 1976.

5.102 Resistive Kink Model of a Solar Flare. D. S. Spicer, Bartol Institute, Swarthmore, Pennsylvania, February 17, 1976.

5.103 Atlas of Coronal Hole Boundaries from Observations Made Prior to the Skylab Mission. J. H. Underwood and R. M. Broussard. Skylab Workshop on Coronal Holes, February 23, 1976.

5.104 Prominences in the EUV. E. J. Schmahl. Marshall Space Flight Center, Huntsville, Alabama, March 1976.

5.105 Observations of Prominences with the HCO Spectroheliometer. E. J. Schmahl. Invited presentation, Kitt Peak Workshop on Solar Prominences, Tucson, Arizona, March 1976.

5.106 Skylab Observations of the Solar Corona. D. M. Rust. University of Maryland, College Park, Maryland, March 1976.

5.107 Observations of Solar X-Ray Bright Points. L. Golub. Harvard College Observatory Seminar, March 1976.

5.108 Seminar. E. Hildner. Los Alamos Scientific Laboratory, Los Alamos, New Mexico, March 2, 1976.

5.109 Mechanisms for Particle Acceleration in Solar Flares. D. S. Spicer. Goddard Space Flight Center/University of Maryland High Energy Astrophysics Seminar, March 15, 1976.

5.110 X-Ray Observations of the Sun. G. S. Vaiana. Boston College Physics Department, Boston, Massachusetts, March 31, 1976.

5.111 Measures of the Solar Spectral Irradiance Between 300 Å and 1200 Å. J. G. Timothy. The Physical Outputs of the Sun, Proceedings of Workshop on Physical Outputs of the Sun, Boulder, Colorado, April 1976.

5.112 The Morphology and Evolution of Coronal Holes. J. D. Bohlin. Colloquium, Observatorie de Paris, Paris, France, April 9, 1976.

5.113 Sunspots and the Coronal Mass and Energy Balance. P. V. Foukal. Solar and Stellar Physics Division Meeting, Harvard College Observatory, May 1976.

5.114 Characteristics of Flares Observed by S-056. J. A. Vorpahl. Seminar, University of Tubingen, Tubingen, West Germany, August 23, 1976.

5.115 Colloquium. A. I. Poland. Colorado State University, Greeley, Colorado, September 1976.

5.116 Solar X-Ray Astronomy. A. S. Krieger. International Conference on the Physics of X-Ray Spectra, NBS, Gaithersburg, Maryland, September 2, 1976; Colloquium, New York Section of the Society for Applied Spectroscopy, Philips Electronic Institute, Inc., Mount Vernon, New York, September 14, 1976; Colloquium, Cornell University, Ithaca, New York, October 14, 1976.

5.117 The Physics of a Flarelike Energy Release Observed by Skylab. J. A. Vorpahl. Seminar, Arcetri Observatory, Florence, Italy, September 13, 1976.

5.118 Initial Results from the S-056 X-Ray Telescope on Skylab. D. L. McKenzie. ATM/OSO-I Workshop, Boulder, Colorado, September 16-18, 1974.

5.119 Analysis of Solar X-Ray Photographs. J. H. Underwood. Solar Neighborhood Meeting, Lockheed Palo Alto Research Laboratories, Palo Alto, California, October 1, 1976.

5.120 The Evolution of Coronal Holes through the Solar Cycle. R. M. Broussard. Solar Neighborhood Meeting, Lockheed Palo Alto Research Laboratories, Palo Alto, California, October 1, 1976.

5.121 A General Review of Present Day Knowledge of Solar Flares. Z. Svestka. Colloquium, State University of California, Northridge, California, October 1, 1976.

5.122 Colloquium. E. Hildner. HAO, Boulder, Colorado, October 21, 1976.

5.123 Ultraviolet Astronomy. A. K. Dupree. Invited lecture in the series New Windows on the Universe, National Air and Space Museum, Washington, D. C., November 1976.

5.124 Seminar. E. Hildner. SEL/NOAA, Boulder, Colorado, November 30, 1976.

5.125 Non-Force-Free Solar Magnetic Fields. H. Comfort. MSFC Space Sciences Colloquium, February 23, 1977.

5.126 Determination of Peak Physical Parameters for Selected Flares Based on Skylab Proportional Counter Data. R. M. Wilson. Skylab Solar Workshop Newsletter, March 1977.

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ERRATA

NASA TECHNICAL MEMORANDUM X-73300

APOLLO TELESCOPE MOUNT — A PARTIAL LISTING OF SCIENTIFIC PUBLICATIONS AND PRESENTATIONS

Edited by John M. Reynolds and William C. Snoddy

April 15, 1976

Page 9: Delete Item 2.5.
Item 2.7: Change "Submitted to Solar Physics" to "Solar Physics (in press)".

Page 10: Item 2.9: Change "Submitted to Solar Physics" to "Solar Physics (in press)".

Page 11: Delete Item 2.25.

Page 14: Delete Item 2.51.

Page 19: Item 3.54 should read: Synoptic Maps of Coronal Holes Boundaries Derived from He II 304 Spectroheliograms from the Manned Skylab Missions. J. D. Bohlin and D. M. Rubenstein, NOAA World Center A for Solar Terrestrial Physics, Report UAG-51, 1975.

Page 25: Item 4.34: Add "Bull. AAS 5, 1973, p. 419."

Page 36: Add publication applicable to Items 4.135 through 4.139: "International Conference on X-Rays in Space (Proceedings), D. Venketesan, ed., University of Calgary, Calgary, Canada, 1975."

Item 4.139: Add "p. 518."

Page 37: Delete Item 4.148.

PRECEDING PAGE BLANK NOT FILMED.

Pages 38-39: Add publication applicable to Items 4.160 through 4.166:
"Scientific Investigations on the Skylab Satellite, M. I. Kent, E. Stuhlinger, and S. T. Wu, eds., Progress in Astronautics and Aeronautics, Vol. 48, American Institute of Aeronautics and Astronautics, New York, 1976."

Page 38: Item 4.161: Add "pp. 161-177."

Item 4.162: Change "Champan" to "Chapman". Add "pp. 179-196."

Page 41: Item 4.189: Add "Bull. AAS 7, 1975, p. 347."

Page 45: Add publication applicable to Items 4.223 through 4.228:
"Space Research, Vol. 16, Akademie-Verlag Press, Berlin, Germany, 1976."

Item 4.229: Add "Lecture Notes in Physics 48, p. 65.

Page 49: Item 4.266: Add "Bull. AAS 7, 1975, p. 473."

APPROVAL

APOLLO TELESCOPE MOUNT — A PARTIAL LISTING OF SCIENTIFIC PUBLICATIONS AND PRESENTATIONS SUPPLEMENT 1

Edited by John M. Reynolds and William C. Snoddy

The information in this report has been reviewed for security classification. Review of any information concerning Department of Defense or Atomic Energy Commission programs has been made by the MSFC Security Classification Officer. This report, in its entirety, has been determined to be unclassified.

This document has also been reviewed and approved for technical accuracy.

Charles A. Lundquist

CHARLES A. LUNDQUIST
Director, Space Sciences Laboratory

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